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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,374	08/01/2003	Sumihito Morita	9281-4642	4172
7590 09/23/2004				
Michael E. Milz Brinks Hofer Gilson & Lione P.O. Box 10395 Chicago, IL 60610			EXAMINER KIM, PAUL D	
			ART UNIT 3729	PAPER NUMBER

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/632,374

Applicant(s)

MORITA ET AL.

Examiner

Paul D Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 23-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/949,251.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/1/03, 12/22/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: --A METHOD OF MANUFACTURING A THIN FILM MAGNETIC HEAD--.

### *Claim Objections*

2. Claims 24-26 are objected to because of the following informalities:

Re. claims 24-26: The phrase "A method" as recited in line 1 needs to change to --The method--.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 23-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re. claims 23: The phrase "the height direction" as recited in line 5 lacks antecedent basis.

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The phrase "the upper surface" as recited in line 8 lacks antecedent basis.

The phrases "the width dimension" and "the track width direction" as recited in lines 27-28 lack antecedent basis.

The phrases "the backward height dimension" and "the edge end" as recited in line 29 lack antecedent basis.

Re. claims 24: The phrase "the top" as recited in line 3 lacks antecedent basis.

Re. claims 26: The phrase "the top" as recited in line 5 lacks antecedent basis.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 23, 24 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Sasaki (US PAT. 6,490,127).

Sasaki teaches a method of making a thin film magnetic head comprising steps of: forming a bottom pole layer (9) on a lower core layer (7) with a predetermined length from a surface facing a recording medium in the height direction as shown in Fig. 4A; forming a first insulating layer (11) on the bottom pole layer and the lower core layer, and then planarizing the upper surfaces of the bottom pole layer and the first insulating

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layer to the same plane as shown in Fig. 4A; forming a nonmagnetic gap layer (12) on at least the bottom pole layer; forming a partial insulating layer (13) on the bottom pole layer with the gap layer provided therebetween to start from a position at a predetermined distance from the surface facing the recording medium so that, inherently, a gap depth is regulated by the predetermined distance; forming a coil layer (16) on a portion of the first insulating layer which is behind the partial insulating layer in the height direction, and coating the coil layer with a second insulating layer (17) as shown in Fig. 6A; and forming an upper core layer (14a, as shown in Fig. 6A) on the gap layer, the partial insulating layer and the second insulating layer, in which the upper core layer comprises a narrow tip region formed on the gap layer and the partial insulating layer to be exposed with a track width at the surface facing the recording medium, and a rear end region formed on the second insulating layer so that the width dimension in the track width direction gradually increases in the backward height direction from the end edge of the tip region as shown in Fig. 10 (see also col. 9, line 18 to col. 15, line 67).

As per claim 24 the partial insulating layer is formed to extend to the top of the first insulating layer as shown in Figs. 4A and 10.

As per claim 26 Sasaki also teaches that a top of the first insulating layer is partially cut to form a coil forming surface behind the bottom pole layer in the height direction and a coil layer is formed on the coil forming surface, and coating the coil layer with a second insulating layer as shown in Fig. 6A.

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***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki.

Sasaki teaches all of the limitations as set forth above except a composition of the partial insulating layer. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to apply an organic insulation layer as recited in the claimed invention because Applicant has not disclosed that the organic insulation layer as recited in the claimed invention provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with Sasaki because the organic insulation layer as recited in the claimed invention would perform equally well with the insulation layer in Sasaki. Therefore, it would have been an obvious matter of design choice to modify the insulation layer of Sasaki to obtain the invention as specified in claim 25.

***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul D Kim whose telephone number is 703-308-8356.

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The examiner can normally be reached on Tuesday-Friday between 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul D Kim  
Examiner  
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